



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBT18526-PO
Job Sheet 187454



Part No: RBT18526-PO

Job Qty: 1 ea

Part Name: Main Rotor Blade Bolt Extractor



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 12/4/18

Job Tracking No:

Due Date: 1/15/19

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG RBT18526 Rev. 1 IPP Rev. A 18.08.28 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	1 pcs	1/15/19	1/15/19	0.00	0.00	Purchasing		DEC 27 2018
110	Packaging	1 pcs	1/15/19	1/15/19	0.00	0.00	Packaging2		DEC 27 2018
120	QC	1 pcs	1/15/19	1/15/19	0.00	0.00	QC6		DEC 29 2018
140	QC	1 pcs	1/15/19	1/15/19	0.00	0.00	QC5	NOT REQUIRED	68
150	Packaging	1 pcs	1/15/19	1/15/19	0.00	0.00	Packaging3		9-89
160	QC21-FG	1 Ea	1/15/19	1/15/19	0.00	0.00	QC21		JAN 03 2019

Part Op 100 - Issue PO to ARROW TECH MACHINE WORKS P/O: 041944 MANUFACTURE RBT18526 AS PER DWG -
Descriptions: Certificate of conformity is required

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
RBT18526P	Main Rotor Blade Bolt Extractor	1 Ea (1 ea)	100-Purchasing	5140310

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	RBT18526P	1	0	0

Part Specifications

s could not be found.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Plex 12/4/18 3:59 PM dart.Lussier.Patrick

Container No: S140311



Part: RBT18526

Job No: 187454

Serial No/Batch: S140311

Revision: 1

Inspector:

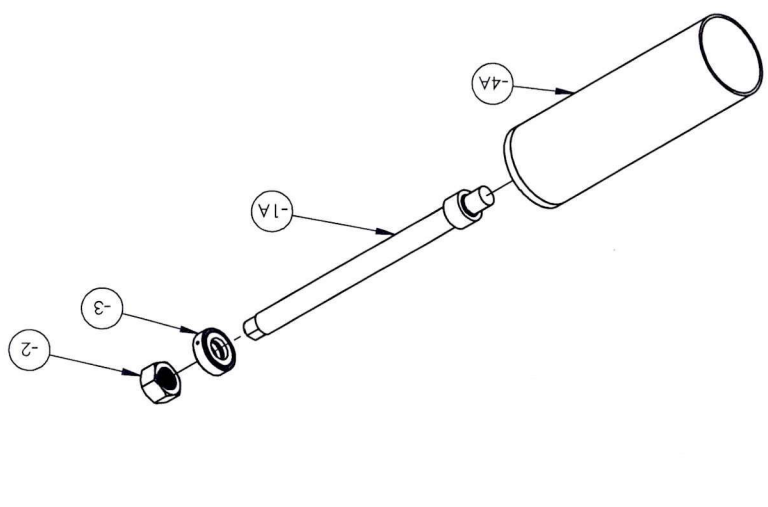
Exp Date:

Instructions:

Date: 12/27/18

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REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
A		CHD TITLED LOCK & REVISION BLOCK. MOVED WELDMENTS TO SEPARATE PAGE. LABELLED ASSY. ADDED 1 TO DIM A1 END OF -1A. LABELLED AND CORRECTED SECTION A-A. ADDED ENGRAVE NOTE -5. ADDED END VIEW -5. MADE CORRECTIONS TO BOM.	12/29/2009	RJC	RW
1	15-0085	-1A ADDED NOTE  CHD P/N WAS -6 IS -2. -3 ADDED P/N GRANGER #42783. -4 CHD DIM WAS Ø1.970-1.969 IS Ø1.9530-1.9520. -5 DELETED.	5/12/2015	RJC	JAG



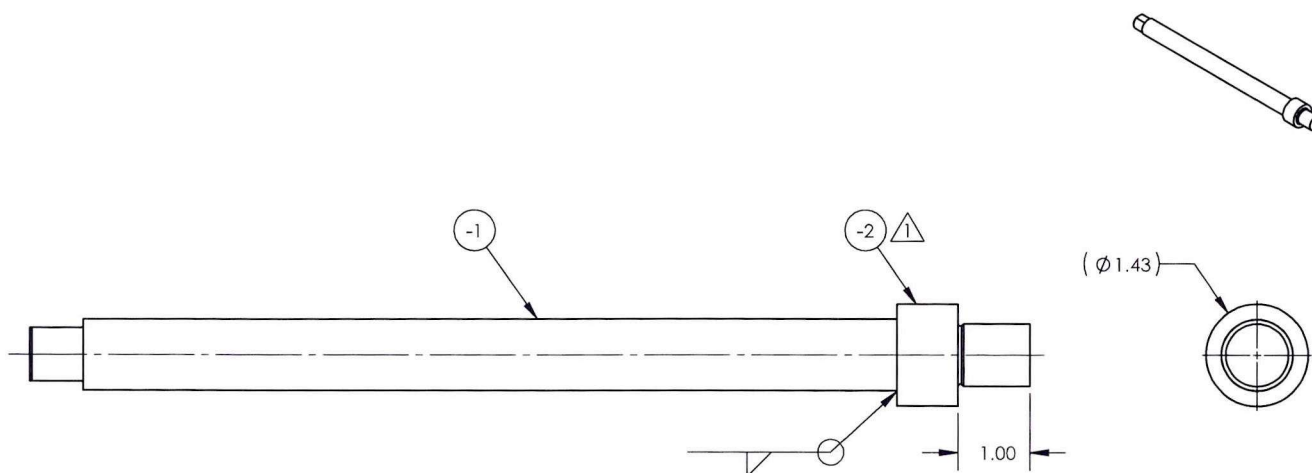
ASSY QTY	ASSY	QTY	B/O	Part #	UNIT	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
		1	B/O	-1A	1	ROD WELDMENT			2
		1	B/O	-1	1	THREADED PULLER ROD	B7 ALL-THREAD	1-14 UNS (MCMMASTER-CARR #92580A153) MODIFIED	3
		1	B/O	-2	1	HEX NUT	STEEL	1-14 UNS (MCMMASTER-CARR #95505A621)	1
		1	B/O	-3	1	RANDED BALL THRUST BEARING	STEEL	Ø1 ID. X 1-31/32 X 5/8 (IDA #D9, GRANGER #42783 OR EQUIV.)	1
		1	B/O	-4A	1	TUBE WELDMENT			4
		1		-4		BEARING PLATE	1018/1020 CR		5
		1		-5		TUBE	DOM		6
ASSY - 4A	ASSY - 1A	1							

SCALE	1:6
DATE	3/14/2003
SHEET	1 OF 6
USED ON MODEL	BELL 204, 205, 212
SPEC	
FINISH	
TREAT	
APPROVED	COLE
DRAWN BY:	2 Muel
DWG NO.	RB118526
REV	1

TITLE	M/R BLADE BOLT RETRACTOR
DART AEROSPACE	

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REVISIONS							
REV	ECR	DESCRIPTION			DATE	INITIAL	APPROVED
1	15-0085	-1A ADDED NOTE  , CH'D P/N WAS -6 IS -2.			5/12/2015	RJC	JAG



NOTE:

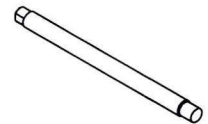
 AFTER WELDING MACHINE -2 NUT ROUND.

(-1A)
ROD WELDMENT

DART AEROSPACE	
TITLE M/R BLADE BOLT EXTRACTOR	
DWG NO. RBT18526-1A	REV 1
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1	DRAWN BY: COLE APPROVED: <i>D. Mail</i> REACT TREAT FINISH BLACK OXIDE SPEC USED ON MODEL BLL 204, 205, 212
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE 1:2	DATE 3/14/2003
SHEET 2 OF 6	

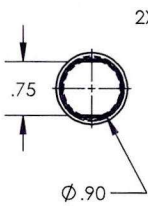
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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



2X .03 X 45°

UNDERCUT
AS REQUIRED



2X R.03

1-14 UNS-2A

7/8-14 UNF -2A

.75

1.00

14.0

(-1)

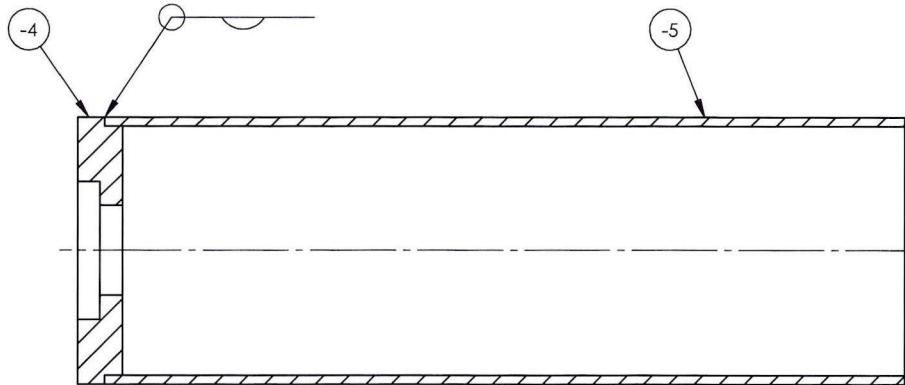
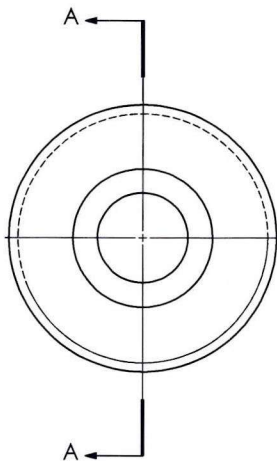
THREADED PULLER ROD



TITLE		M/R BLADE BOLT EXTRACTOR	
DWG NO.	RBT18526-1	REV	1
MAT'L B7 ALL-THREAD	DRAWN BY: COLE	APPROVED	<i>D. West</i>
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	TEST	FINISH	SEE -1A WELDMENT
.XXX ± .005 FRACTIONS ± 1/8	OR .016R	SPEC	USED ON MODEL
.XX ± .01 ANGLES ± .5°	1. BREAK ALL SHARP EDGES .016 X 45°	2. DIMENSIONAL LIMITS APPLY AFTER PLATING	BELL 204, 205, 212
SCALE 1:2	DATE 3/14/2003	SHEET 3 OF 6	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



SECTION A-A

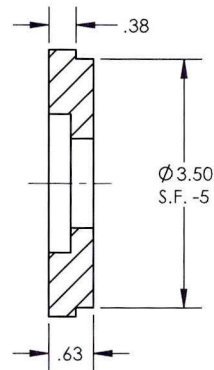
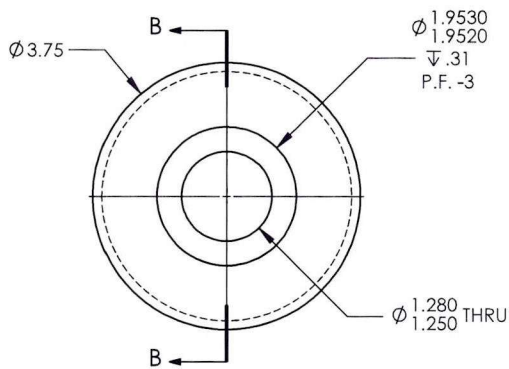
-4A

TUBE WELDMENT

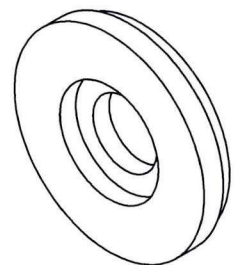
DART AEROSPACE	
TITLE M/R BLADE BOLT EXTRACTOR	
DWG NO. RBT18526-4A	REV 1
MAT'L UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5° .X ± .1	DRAWN BY: COLE APPROVED: <i>D. West</i> TREAT: BLACK OXIDE FINISH: SPEC
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	USED ON MODEL BELL 204, 205, 212
SCALE 1:2	DATE 3/14/2003 SHEET 4 OF 6

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
1	15-0085	-4 CH'D DIM WAS Ø1.970-1.969 IS Ø1.9530-1.9520.	5/12/2015	RJC
				JAG



SECTION B-B

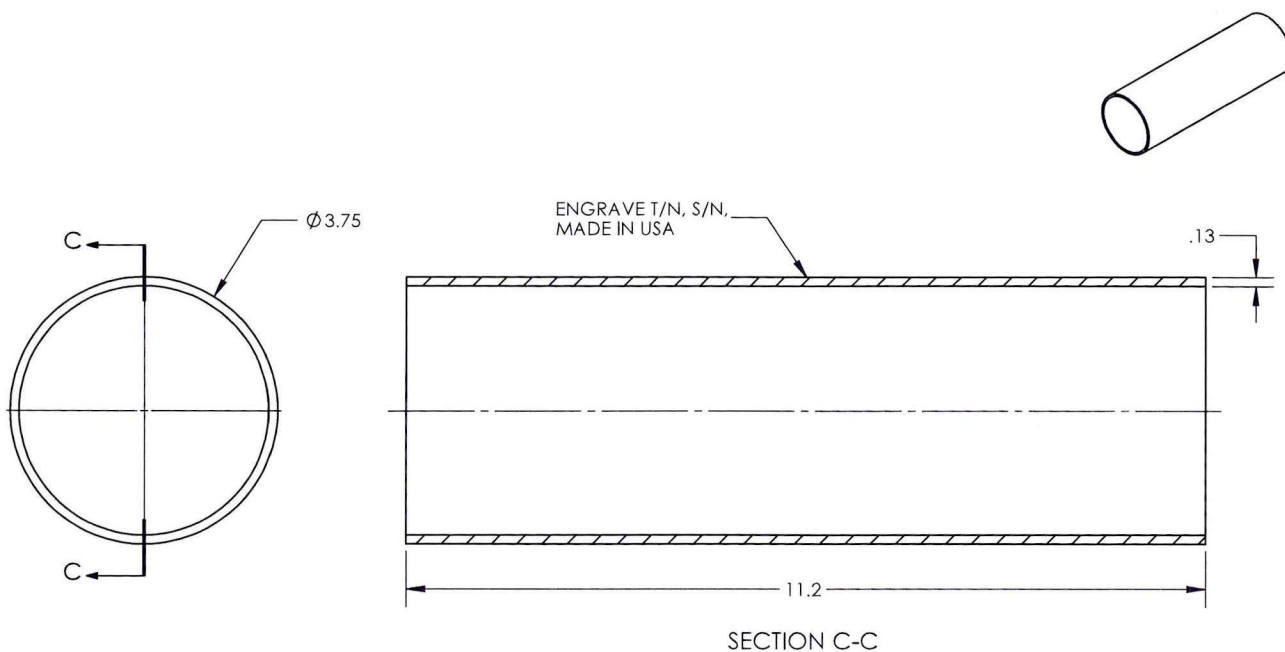


(-4)
BEARING PLATE

DART AEROSPACE	
TITLE M/R BLADE BOLT EXTRACTOR	
DWG NO. RBT18526-4	REV 1
MAT'L 1018/1020 CR	DRAWN BY: COLE
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	APPROVED <i>D. Mail</i>
.XXX ± .005 FRACTIONS ± 1/8	TEXT
.XX ± .01 ANGLES ± 5°	TREAT
.X ± .1	FINISH SEE -4A WELDMENT
1. BREAK ALL SHARP EDGES .015 x 45°	SPEC
OR .015R	USED ON MODEL
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	BELL 204, 205, 212
SCALE 1:2	DATE 3/14/2003
SHEET 5 OF 6	

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
				APPROVED



SECTION C-C

(-5)
TUBE

DART AEROSPACE	
TITLE M/R BLADE BOLT EXTRACTOR	
DWG NO. RBT18526-5	REV 1
MAT'L DOM UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .6° .X ± .1	DRAWN BY: COLE APPROVED: <i>D. West</i> TREAT FINISH SEE -4A WELDMENT SPEC USED ON MODEL BELL 204, 205, 212
1. BREAK ALL SHARP EDGES .016 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	SCALE 1:2 DATE 3/14/2003 SHEET 6 OF 6



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER
PO041944

Supplier: ARR002-VU
Arrow Tech Machine Works
29751 E. Enid Road,
Unit C
Eugene, OR 97402 USA
Phone: 541-780-6938
Fax: 458-215-4938

PO No:	PO041944
PO Date:	12/4/18
Due Date:	1/15/19
Purchase Order Revision:	
Revision Date:	
Ship-To Contact:	Phone:

Ship To:

Pymt Terms:	Net 30
Freight Terms:	
Special Comments:	

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1	187454	RBT18526P			Main Rotor Blade Bolt Extractor REV 1	Firmed	-	1/15/19	Ea	0 Ea	1 Ea	\$813.00/Ea	\$813.00
Grand Total:													\$813.00

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

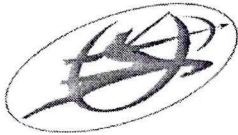
Procurement Quality Clauses

A005 RIGHT OF ENTRY
A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)
A012 CHEMICAL AND PHYSICAL TEST REPORTS
A016 PERSONNEL QUALIFICATION
A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)
A026 CERTIFICATION OF MATERIAL CONFORMANCE
A041 QUALITY MANAGEMENT SYSTEM
A042 DART NOTIFICATION BY SUPPLIER
A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Plex 12/4/18 4:01 PM dart.Lussier.Patrick



**PHGE Machineworks dba
Arrowtech Machineworks**
29751 E Enid Rd. Unit C
Eugene, Oregon 97402
Phone: (541) 780-6938
Fax: (458) 215-4938

Packing Slip

NO. 371

Date: 12/21/2018
PO Ref: 041944 ✓
Ship via: Fedex Priority

Bill To:
Dart Aerospace
1270 Aberdeen St. Hawkesbury, ON
CANADA K6A 1K7

Ship To:
Dart Aerospace
1271 Aberdeen St. Hawkesbury, ON
CANADA K6A 1K8

Qty

1 ✓

Item

MAIN ROTOR BLADE BOLT EXTRACTOR

Part No.

RBT18526 ✓

Received by: _____

Packaged by: _____

Checked by: CE

Thank You



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No: 041944 ✓ Dated: 12/21/2018

Our Order / Job No: 041944-1AWT Order Qty: 1 ✓

Part Name: M/R BLADE BOLT EXTRACTOR

Part Number: RBT18526 ✓

Lot Size: N/A Ship Date: 12/21/2018

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number: RBT18526 Rev: 1

Material Size and Type: -4/1018 STEEL; -5/ DOM STEEL

Material Specifications: 1018 STEEL: ASTM A108, ASTM A29; DOM STEEL: ASTM A513

Heat Treatment: N/A

Plating/Finish: BLACK OXIDE: QMSI-6.2.2 B.O. REV-D

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

Date: 12/21/18

Signed: _____


DAS
68
9-89

PHGE Machine Works LLC dba Arrow Tech Machine Works
29751 E. Enid Rd. Unit C Eugene, Oregon 97402
Main: (541) 780-6938 | Fax: (458) 215-4938
www.atechmachineworks.com